

**RESPONSE UNDER 37 C.F.R. 1.116  
EXPEDITED PROCEDURE  
TECHNOLOGY CENTER 2618**

Attorney Docket No. 9694-2

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Marcus Söderlund  
Serial No.: 10/535,033  
Filed: May 13, 2005  
For: **FLEXIBLE CONDUCTORS CONNECTED BETWEEN TWO PARTS OF A  
PORTABLE ELECTRONIC DEVICE**

Confirmation No.: 3566  
Group Art Unit: 2618  
Examiner: April S. Guzman

June 11, 2008

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Commissioner for Patents  
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Alexandria, VA 22313-1450

**REQUEST FOR RECONSIDERATION AFTER FINAL ACTION  
PURSUANT TO 37 C.F.R. § 1.116**

Sir:

Applicants have carefully considered the cited references and the Examiner's further explanation of the rejections in the final Office Action mailed April 14, 2008 (Office Action) and submit that pending claims are patentable for at least the reasons explained below. For the sake of brevity, Applicants explain herein only the additional bases for patentability beyond the explanation provided in their Amendment of January 14, 2008 which is maintained and incorporated herein by reference.

**Status of the Claims:**

Claims 1-10, 13-14, 16, and 20 stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 5,363,089 to Goldenberg ("Goldenberg") in view of U.S. Patent No. 6,990,355 to Ueyama et al. ("Ueyama"). Claims 11-12 stand rejected under 35 U.S.C. 103(a) as unpatentable over Goldenberg in view of Ueyama and further in view of U.S. Patent No. 5,966,777 to Jantschek ("Jantschek"). Claims 15, 17, 18, and 21 stand rejected under 35 U.S.C. 103(a) as unpatentable over Goldenberg in view of Ueyama and further in view of U.S. Pat. No. 6,466,202 to Suso et al. ("Suso").

**Independent Claim 1:**

Goldenberg and Ueyama Do Not Disclose All Recitations of Claim 1:

Claim 1 recites *inter alia* that a first set of flexible electrical conductors are connected to the first part at the *exterior side* adjacent the bottom side thereof and are connected to the second part at the *interior side* adjacent the bottom side thereof, and a second set of flexible electrical conductors are connected to the second part at the *exterior side* adjacent the bottom side thereof and are connected to the first part at the *interior side* adjacent the bottom side thereof. Thus, the first and second sets of flexible electrical conductors are *oppositely attached relative to one another*, with the first set of conductors connected to the first part *exterior* and second part *interior*, while the second set of conductors is oppositely connected to the first part *interior* and second part *exterior*.

The Office Action on page 4 concedes that the above-underlined recitations of Claim 1 are not disclosed by Goldenberg. However, the Office Action on page 7 explains that Ueyama discloses a first and second set of flexible electrical conductors and suggest that it would therefore be obvious to one of ordinary skill in the art to incorporate the teachings of Ueyama into the teachings of Goldenberg to obtain device having the features recited in Claim 1. Applicant respectfully disagrees.

If a person of skill in the art were to combine the teachings of Ueyama and Goldenberg, the resulting device would have a first and a second set of flexible electrical connectors that are contained in the same single flexible circuit that is connected in the way shown in Figure 5 of Goldenberg, because the first and the second set of flexible electrical conductors (i.e., first and second conductor patterns 111 and 112) disclosed by Ueyama are contained in the same single flexible circuit (215). Nothing in Ueyama and Goldenberg would lead one of skill in the art to utilize first and second sets of flexible electrical conductors that are *oppositely attached relative to one another*, with the first set of conductors connected to the first part exterior and second part interior, and with the second set of conductors oppositely connected to the first part interior and second part exterior.

The law is well established that a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l Co. v. Teleflex Inc.*, 550 U. S. 1, 15 (2007). One of ordinary skill in the art in view of Goldenberg's teaching of first and second geared portions would not be

motivated to modify Ueyama based on Goldenberg's disclosure of a single set of flexible electrical conductors to obtain the above-underlined features of the device of Claim 1, and without the impermissible use of hindsight reasoning in view of the present application specification.

Applicants therefore submit that the combination of Goldenberg and Ueyama does not teach or suggest each and every recitation of Claim 1 and, therefore, request allowance of Claim 1.

Goldenberg and Ueyama Are Not Properly Combinable to Reject Claim 1:

Applicants further submit that Goldenberg and Ueyama are not properly combinable to reject Claim 1.

The opposite configuration of the first and second sets of flexible connectors as recited in Claim 1 may have resulted from Applicants realization that two separate sets of flexible electrical conductors which are oppositely attached relative to one another to opposite sides of the first and second parts, may function to increase the stability of the rotational movement between the two parts of a portable electronic device. The two separate sets of flexible electrical conductors configured as recited in Claim 1 may therefore render as unnecessary use of a gear wheel or similar structure to provide stable rotational movement between two parts of a portable electronic device.

Goldenberg describes that it's geared portions are essential components of its hinge devices. For example, Goldenberg describes intermeshing of first and second geared portions of the respective first and second parts of the electronic device as being essential to achieve stable rotation of one part relative to the other part. The essentiality of the first and second geared portions is further emphasized in Goldenberg's claim one which recites, *inter alia*, "a hinged electronic device comprising ... a first geared portion [117 in Fig. 1] having a first plurality of cogs formed thereon substantially parallel to the first axis, ... a second geared portion [122 in Fig. 1] having a second plurality of cogs formed thereon substantially parallel to the first axis, ... and an elastomeric band disposed within the grooves formed in the first and second cylindrical posts for movably securing the first cylindrical post to the second cylindrical post such that the first and second pluralities of cogs mesh when the first body portion is secured to the second body portion of the first and second slender proposed."

(Emphasis added).

MPEP Section 2143.01(VI) states that a proposed modification to a reference cannot change the principal operation of the reference, and cites *In re Ratti* where "if the proposed modification or combination of the prior art to change the principal operation of the prior art invention may modify, and the teachings of the references are not sufficient to render the claims *prima facie* obvious." *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). The Federal Circuit has similarly stated that when a §103 rejection is based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference, such a proposed modification is not proper and the *prima facie* case of obviousness cannot properly be made. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). Again, nothing in Ueyama and Goldenberg would lead one of skill in the art to utilize first and second sets of flexible electrical conductors that are oppositely attached relative to one another, with the first set of conductors connected to the first part exterior and second part interior, and with the second set of conductors oppositely connected to the first part interior and second part exterior.

Consequently, the modification proposed by the Office Action which one of skill in the art would have to make to Goldenberg's teachings in order to incorporate the proposed change to obtain the above-underlined features of Claim 1 would destroy the intent, purpose, and function of Goldenberg's single set of conductors that are routed through the center of an essential rotational gear coupling between the two parts. Applicants therefore submit that Goldenberg and Ueyama are not properly combinable to rejection Claim 1.

The combination of Goldenberg and Ueyama relied upon in the Office Action is therefore improper as *prima facie* evidence of obviousness of Claim 1 under the MPEP and Federal Circuit law. Applicant therefore requests reconsideration and allowance of Claim 1.

**Independent Claim 17:**

Claim 17 recites *inter alia* that a first set of flexible electrical conductors *are connected to the first part at the exterior side adjacent the bottom side thereof and are connected to the second part at the interior side adjacent the bottom side thereof*, and a second set of flexible electrical conductors *are connected to the second part at the exterior side adjacent the bottom side thereof and are connected to the first part at the interior side adjacent the bottom side thereof*. Applicant notes that the above-underlined recitations of Claim 17 correspond to the above-underlined recitations of Claim 1.

In rejecting Claim 17, the Office Action cites Ueyama as allegedly disclosing the above-underlined recitations of Claim 17, and concedes that neither Goldenberg nor Suso disclose the above-underlined recitations. However, as explained above for the corresponding recitations of Claim 1, Ueyama does not disclose these recitations of Claim 17. Ueyama therefore does not disclose the recitations of Claim 17 that are also not taught by Goldenberg and Suso. Accordingly, Applicant submits that Claim 17 is patentable over Goldenberg in view of Ueyama and Suso. Reconsideration and allowance of Claim 17 is respectfully requested.

**Dependent Claims 2-5, 7-16, 18, 20 and 21:**

Dependent Claims 2-5, 7-16, 18, 20 and 21 are patentable at least per the patentability of the independent claims from which they depend.

Moreover, at least dependent Claims 20 and 21 provide independent bases for patentability in view of their recitation that the first and second sets of flexible electrical conductors are spaced apart from one another on opposite sides of the hinge. An exemplary embodiment of Claims 20 and 21 is shown in FIG. 4 of the present application. In sharp contrast, Goldenberg discloses a single flexible conductor (215) that extends across a central portion of hinge (235) (Goldenberg, FIG. 2). Similarly, Ueyama discloses a single flexible print circuit board (1) that extends through a central portion of the hinge (6). None of the references, either alone or in combination, disclose first and second sets of flexible electrical conductors that are spaced apart from one another on opposite sides of a hinge as defined in Claims 20 and 21. Applicant therefore submits that Claims 20 and 21 have independent bases for patentability over the cited references.

**CONCLUSION**

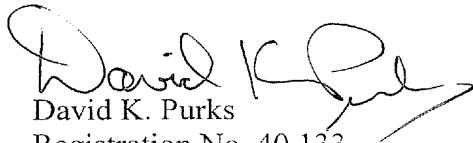
In view of the above amendments and remarks, Applicant respectfully requests withdrawal of all objections and rejections and the allowance of all claims in due course. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is encouraged to contact the undersigned by telephone at (919) 854-1400.

It is not believed that an extension of time and/or additional fee(s)-including fees for net addition of claims-are required, beyond those that may otherwise be provided for in

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documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper may be charged to our Deposit Account No. 50-0220.

Respectfully submitted,

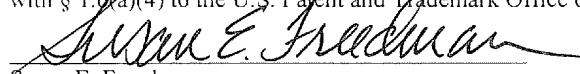
  
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**CERTIFICATION OF TRANSMISSION**

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on June 11, 2008.

  
Susan E. Freedman  
Date of Signature: June 11, 2008